

## **IN THE CLAIMS:**

**1. (Previously Presented)** A method for discharging a reduced smoke pyrotechnic display device, comprising the steps of:

propagating flame over at least one surface of a pyrotechnic composition within a launch tube;

subsequently igniting a smokeless pyrotechnic propellant disposed in proximity to said pyrotechnic composition within said launch tube; and

expelling said ignited pyrotechnic composition from a discharge end of said launch tube.

**2. (Original)** The method of Claim 1 for discharging a reduced smoke pyrotechnic display device further including the initial step of igniting a pyrotechnic prime composition within said launch tube, said pyrotechnic prime composition disposed in combustion proximity to said pyrotechnic composition; and

wherein ignition of said pyrotechnic prime composition facilitates propagating said flame over said one or more surfaces of said pyrotechnic composition within said launch tube.

**3. (Previously Presented)** The method of Claim 1 for discharging a reduced smoke pyrotechnic display device further including the step of consuming a combustion delay component separating said ignited pyrotechnic composition from said smokeless pyrotechnic propellant prior to igniting said smokeless pyrotechnic propellant.

**4. (Previously Presented)** A method for assembling a reduced smoke pyrotechnic display device, comprising the steps of:

providing a launch tube having an enclosed base, an open discharge end, and a barrel disposed between said enclosed base and said open discharge end;

placing a reduced smoke pyrotechnic propellant within said enclosed base;

enclosing said reduced smoke pyrotechnic propellant within said enclosed base;

placing at least one pyrotechnic composition within said enclosed base;

enclosing said at least one pyrotechnic composition within said enclosed base;

and

placing at least one ignition source within said enclosed base in combustion proximity to said at least one pyrotechnic composition.

**5. (Previously Presented)** The method of Claim 4 for assembling a reduced smoke pyrotechnic display device further including the step of placing a second ignition source within said enclosed base in combustion proximity to said reduced smoke pyrotechnic propellant.

**6. (Cancelled)**

**7. (Previously Presented)** The method of Claim 4 for assembling a reduced smoke pyrotechnic display device further including the step of disposing a non-combustable separation member within said enclosed base between said one or more pyrotechnic compositions and said reduced smoke pyrotechnic propellant.

**8. (Original)** The method of Claim 7 for assembling a reduced smoke pyrotechnic display device wherein said non-combustable separation member includes at least one axial bore, said at least one axial bore obstructed by a combustion delay element.

**9. (Previously Presented)** A reduced smoke pyrotechnic display device, comprising

an enclosed base defining an open ended combustion chamber;

a launch tube coupled to said enclosed base about said open ended combustion chamber, said launch tube having an open discharge end;

a reduced smoke pyrotechnic propellant disposed in said open ended combustion chamber;

a sealing member fittingly disposed in said combustion chamber between said reduced smoke pyrotechnic propellant and said open discharge end;

at least one pyrotechnic composition disposed in said combustion chamber between said sealing member and said open discharge end;

at least one ignition source disposed in said combustion chamber in operative proximity to said at least one pyrotechnic composition.

**10. (Original)** The reduced smoke pyrotechnic device of Claim 9 wherein said sealing member further includes an axial bore; and

a combustion delay component is disposed to obstruct said axial bore.

**11. (Original)** The reduced smoke pyrotechnic device of Claim 9 further including a closure member fittingly disposed in said combustion chamber between said at least one pyrotechnic composition and said open discharge end.

**12. (Previously Presented)** The reduced smoke pyrotechnic device of Claim 9 further including a second ignition source disposed in said combustion chamber in operative proximity to said reduced smoke pyrotechnic propellant.

**13. (Cancelled)**

**14. (Previously Presented)** The reduced smoke pyrotechnic device of Claim 9 wherein said reduced smoke pyrotechnic propellant is nitrocellulose.

**15. (Previously Presented)** The method of Claim 4 for assembling a reduced smoke pyrotechnic display device wherein said step of placing a reduced smoke pyrotechnic propellant within said enclosed base includes placing a nitrocellulose pyrotechnic propellant within said enclosed base.

**16. (Previously Presented)** A method for discharging a burning pyrotechnic element from a launch tube of a reduced smoke pyrotechnic display device, comprising the steps of:

igniting the pyrotechnic element within the launch tube;

igniting a reduced smoke pyrotechnic propellant disposed in proximity to said ignited pyrotechnic element within the launch tube;

wherein said ignition of said reduced smoke pyrotechnic propellant is delayed until after ignition of the pyrotechnic element within the launch tube; and

wherein ignition of said reduced smoke pyrotechnic propellant expels said ignited pyrotechnic element from a discharge end of the launch tube.

**17. (Previously Presented)** The method of Claim 16 wherein said pyrotechnic element is a pyrotechnic composition.

**18. (Previously Presented)** The method of Claim 16 wherein said reduced smoke pyrotechnic propellant is ignited by propagation of flame from said ignited pyrotechnic element within the launch tube, following combustion of a combustible delay element disposed between the pyrotechnic element and said reduced smoke pyrotechnic propellant.

**19. (Previously Presented)** The method of Claim 16 wherein the pyrotechnic element is an aerial shell consisting of a non-burning body having a hollow core within which is contained at least one pyrotechnic charge and an ignitable delay fuse associated with said at least one pyrotechnic charge for ignition within the launch tube.

**20. (Previously Presented)** A reduced smoke pyrotechnic display device, comprising:

an enclosed base defining an open ended combustion chamber;

a launch tube coupled to said enclosed base about said open ended combustion chamber, said launch tube having a discharge end;

a reduced smoke pyrotechnic propellant disposed in said open ended combustion chamber;

an ignitable pyrotechnic display element disposed within said combustion chamber between said reduced smoke pyrotechnic propellant and said launch tube discharge end;

a controlled ignition source disposed in proximity to said ignitable pyrotechnic display element; and

a means to ignite said reduced smoke pyrotechnic propellant delayed from ignition of said ignitable pyrotechnic display element.

**21. (Previously Presented)** The reduced smoke pyrotechnic display device of Claim 20 wherein said ignitable pyrotechnic display element is a pyrotechnic composition.

**22. (Previously Presented)** The reduced smoke pyrotechnic display device of Claim 20 wherein said means to ignite said reduced smoke propellant is a

combustion delay element disposed between said ignition source and said reduced smoke pyrotechnic propellant.

**23. (Previously Presented)** The reduced smoke pyrotechnic display device of Claim 20 wherein said means to ignite said reduced smoke propellant is a second controlled ignition source, said second controlled ignition source disposed in proximity to said reduced smoke pyrotechnic propellant and controlled to ignite after ignition of said pyrotechnic display element.

**24. (Previously Presented)** The reduced smoke pyrotechnic display device of Claim 20 wherein said ignitable pyrotechnic display element is an aerial shell consisting of a non-burning body having a hollow core within which is contained at least one pyrotechnic charge and an ignitable delay fuse associated with said at least one pyrotechnic charge for ignition by said controlled ignition source.